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15 same light

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USPT	16 same condens\$	0	<u>L7</u>
USPT	15 same light	33	<u>L6</u>
USPT	12 same reduc\$ same oxidiz\$	242	<u>L5</u>
USPT	12 same reduc\$ same oxidiz\$ same condensation	0	<u>L4</u>
USPT	12 same reduc\$ same oxidiz\$ same condensation same light	0	<u>L3</u>
USPT	produc\$ same (organic near0 compound\$)	18346	<u>L2</u>
USPT	RT near0 PCR	3167	<u>L1</u>

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L12: Entry 21 of 22

File: USPT

Sep 12, 1995

DOCUMENT-IDENTIFIER: US 5449754 A

TITLE: Generation of combinatorial libraries

BSPR:

Fodor and coworkers recently described a novel method for synthesizing large numbers of peptides bound to a solid support, by combining the techniques of solid phase peptide synthesis, photolabile protection, and photolithography (see Fodor, S. P. A., Science, (1991) 251,767). Their method, called light activated parallel chemical synthesis, makes possible the systematic synthesis and investigation of a large number of different peptides. Its principal advantage is the ease with which any peptide can be decoded. Merely identifying the spatial coordinates of the desired peptide is sufficient to determine its sequence. However, the technique has some serious disadvantages. The method uses amino acids with photolabile protecting groups. Peptide synthesis involves a new set of chemistries; achieving high yields of the desired peptides will require significant effort. More importantly, the use of photolithographic masks combined with solid phase synthesis is inherently labor intensive, and requires specialized skills and equipment. It is generally conceded that the establishment of this method as a routine is simply not possible, since it involves large investments in both equipment and personnel (see Jung, G., and Beck Sickinger, A. G., Angewandte Chemie, (1992) 31,367).

WEST☐ Generate Collection

L6: Entry 80 of 131

File: USPT

Sep 27, 1994

DOCUMENT-IDENTIFIER: US 5350681 A

TITLE: Enzymatic membrane method for the synthesis and separation of peptides

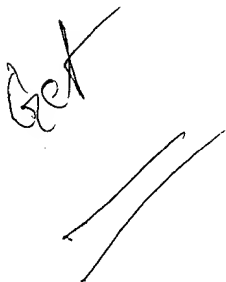
BSPR:

Another advantage of the present invention is to provide an economical process for the enzymatic synthesis of peptides that provides for the efficient use of enzyme and the means to effect the synthesis on a continuous basis.

DEPR:

Other trapping means include the formation of specific molecular complexes. Specific cavities of zeolites and/or cyclodextrins may be utilized. In addition to trapping, solvent extraction, adsorption on a matrix or precipitation with a reagent may be utilized for the step of separating the protected, uncharged, peptide product from the aqueous product phase. The use of membrane contactors in conjunction with reverse osmosis, as described in Examples 14 and 17, will cause the desired displacement of the proteosynthetic equilibrium without affecting the kinetics of peptide synthesis in the enzyme reactor. This approach is considered as a viable alternative to the use of a second enzyme for the purpose of driving the proteosynthesis to completion. Its usefulness, however, is dictated in practice by the relative affinity of the uncharged peptide intermediate towards the oil/water phase. The higher the partition towards the oil phase is, the lower the permeability of the peptide towards the aqueous product phase will become, making the transfer from oil to water the rate-limiting step of the process. This phenomenon is illustrated in Example 16, and FIG. 21, where the rate of release of the peptide N-formyl-(.beta.-methyl)-asp-phe-O- from the oil phase into the aqueous product phase, called here V.sub.perm, is increased by a factor of two when the aqueous phase contains the enzyme aminoacylase able to convert that peptide into the more hydrophilic N-formyl-(.beta.-methyl)-asp-phe-OH.

Get



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L12: Entry 19 of 22

File: USPT

Jul 22, 1997

DOCUMENT-IDENTIFIER: US 5650489 A

TITLE: Random bio-oligomer library, a method of synthesis thereof, and a method of use thereof

BSPR:

Although useful, as a practical matter the chemical techniques of Geysen, Fodor, Houghton, Berg and Furka and co-workers allow the synthesis and testing of only hundreds to a few thousand peptides at a time. These techniques are quite limited in light of the millions of possible peptide sequences, one or more of which might correspond to the binding sites between the entities of interest. With 20 known common amino acids, in any sequence of five amino acids, there are 20^5 , or about 3.2×10^6 , possible amino acid combinations. None of the procedures enable the synthesis of this many peptides at one time. Further multiplicity results by varying peptide chain length. Similarly, conventional peptide synthesis, such as that described in Stewart and Young (1984, Solid Phase Synthesis, Second Edition, Pierce Chemical Co., Rockford, Ill.) does not provide a method for the synthesis of thousands to millions of peptides at a time.

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L6: Entry 11 of 33

File: USPT

Feb 28, 1995

DOCUMENT-IDENTIFIER: US 5393638 A
TITLE: Image forming method

DEPV:

(b) Next, the image forming medium 100 in which the latent image has been formed is heated (i.e., thermally developed) as shown in FIG. 1B. As a result of heating the image forming layer 1, the silver metal selectively acts as a catalyst in the exposed area 1a, where the organic silver salt reacts with the reducing agent. The organic silver salt is reduced to a silver atom (metallic silver) and at the same time the reducing agent is oxidized to form an oxidized product. This oxidized product has light absorption. In another instance, the oxidized product further reacts with a coupler to produce an organic compound that exhibits light absorption.

DEPV:

(b) Next, the image forming medium 130 in which the latent image has been formed is heated (i.e., thermally developed) as shown in FIG. 3B. As a result, the organic silver salt is reduced to a silver atom (metallic silver) and at the same time the reducing agent is oxidized to form an oxidized product having light absorption. In another instance, the oxidized product further reacts with a coupler to produce an organic compound that exhibits light absorption.

WEST

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L6: Entry 24 of 33

File: USPT

Feb 16, 1982

DOCUMENT-IDENTIFIER: US 4315998 A

TITLE: Polymer-bound photosensitizing catalysts

BSPR:

The particular photosensitizing catalytic compound which is bound to the polymer support in carrying out any given photosensitized chemical reaction in accordance with the present invention, will depend largely upon the nature of the particular photosensitized chemical reaction being conducted. For example, polymer-bound carbonyl compounds, such as para-benzoyl benzoic acid bound to a polymer support, are effective in photosensitizing photodimerization reactions, such as the photodimerization of coumarin and the photodimerization of indene, and in photocycloaddition reactions, such as the photocycloaddition of tetrachloroethylene to cyclopentadiene. The polymer-bound photosensitizer dyes, on the other hand, are particularly effective in sensitizing photooxidation reactions wherein a photooxidizable substrate is oxidized by reaction with singlet oxygen generated from molecular oxygen in its paramagnetic ground state by energy transfer from light and the photosensitizing catalyst. Numerous organic compound substrates which are photooxidizable by reaction with singlet oxygen in this manner are well known in the art, and the photosensitizing activity of the polymer-bound photosensitizer dyes of the present invention can be used to advantage in the photooxidation of any of these substances. Representative photooxidizable substrates are, for example, such open chain (aliphatic) and cyclic mono-olefins as 1-heptene, 1-octene, 1-dodecene, 1-hexadecene, diisobutylene, 2-methyl-2-butene, tetramethylethylene, cyclopentene, 1-methyl-1-cyclopentene, cyclohexane, 1-methylcyclohexene, 1,2-dimethylcyclohexene, cyclooctene, alpha-pinene, dipentene, limonene, carvomenthene, terpinolene, propylene trimers, tetramers, pentamers, and the like, all of which are photooxidized to allylic hydroperoxides which can readily be reduced to alcohols or used in other ways as organic intermediates for the production of useful compounds. Other photooxidizable substrates include cyclic conjugated dienes, which are photooxidized to endocyclic peroxides, and open chain conjugated dienes, which are photooxidized to exocyclic peroxides. Representative of such dienes are, for example, cyclopentadiene, 1,3-cyclohexadiene, 2-methyl-1,3-cyclohexadiene, alphaterpinene, alpha-phellandrene, alpha-pyronene, beta-pyronene, 1,3-hexadiene 1,3-dimethylbutadiene, 2,3-dimethylbutadiene, alloocimene, and the like. Still further photooxidizable substrates whose photooxidation can be sensitized by the polymer-bound photosensitizing catalyst of the present invention include for example, heterocyclic olefins, for example, furans, 1,2-diphenyl-p-dioxene, and dihydropyran, which are photooxidized by 1,2-cycloaddition to 1,2-dioxetanes which cleave thermally to carbonyl-containing compounds; amines, thioureas, for example, thiourea; dienes of the sterol series, for example, ergosterol; triolefins; olefinic acids, for example, oleic acids; fulvenes, for example, phenylfulvene;; aldehydes; phenylhydrazones; semicarbazones, thiosemicarbazones, enol ethers, sulfinic acids, and the like. Such groups as ester, amide, urethane, n-acetyl, phenyl, hydroxyl, chloride, bromide, etc., even if adjacent to the oxidizable group in the foregoing types of substrates, do not ordinarily interfere in the photooxidization reaction.

WEST**End of Result Set**☐ Generate Collection

L4: Entry 257 of 257

File: USPT

Aug 15, 1995

DOCUMENT-IDENTIFIER: US 5441883 A

TITLE: A3 adenosine receptor, DNA, and uses

DEPR:

RT-PCR was performed as follows. Total RNA was isolated from different rat tissues as described above. 2 .mu.g total RNA were reverse transcribed by oligo-dT priming in a 20 .mu.l solution containing 50 mM Tris-HCl (pH 8.0), 75 mM KCl, 3 mM MgCl.sub.2, 100 mM DTT, 40 Units RNasin, 1 mM dNTPs, and 50 units of murine reverse transcriptase (BRL). cDNA synthesis was performed for 2 hrs at 37.degree. C. The single-stranded cDNA products were denatured by twice heating to 95.degree. C. for 10 min and cooling on ice for 10 min. 1 .mu.l of the single-stranded cDNA products were then subjected to 27 cycles of PCR amplification using these two primers: ##STR4## Each PCR cycle consisted of denaturing at 95.degree. C. for 45 seconds, annealing at 55.degree. C. for 45 seconds and extending at 72.degree. C. for 90 seconds. PCR products were then run on a 1.2% agarose gel and examined by ethidium bromide staining. A standard curve was developed to ensure linearity of the PCR amplification as follows. pGem226 was linearized by XbaI, and RNA was synthesized with T7 RNA polymerase (BRL). 640, 320, 160, 80, 40, 20, and 10 fg of the in vitro synthesized template RNA were reverse transcribed and PCR amplified as described above. Ethidium bromide staining of the PCR products indicated that the amount of amplified products obtained in RT-PCR amplification of tissue cDNA was approximately proportional to the amount of template added.

WEST☐ Generate Collection

L3: Entry 10 of 14

File: USPT

Jun 17, 1997

DOCUMENT-IDENTIFIER: US 5639853 A

TITLE: Respiratory syncytial virus vaccines

DEPR:

The proteins, polypeptides and peptides of the present invention can be prepared in a wide variety of ways. The polypeptides, because of their relatively short size may be synthesized in solution or on a solid support in accordance with conventional techniques. Various automatic synthesizers are commercially available and can be used in accordance with known protocols. See, for example, Stewart and Young, 1984, Solid Phase Peptide Synthesis, 2d Ed., Pierce Chemical Co. The structural properties of polypeptides, of which three dimensional configuration is one, may only be minutely changed by the introduction of a small number of modifications such as substitutions, insertions and deletions of one or more amino acids. Generally, such substitutions in the amino acid sequence of a polypeptide are in the amount of less than twenty percent, more usually less than ten percent. Generally, conservative substitutions are less likely to make significant structural changes than non-conservative substitutions, which in turn are less likely to make significant structural changes than insertions or deletions. Examples of conservative substitutions are glycine for alanine; valine for isoleucine; aspartic acid for glutamic acid; asparagine for glutamine; serine for threonine; lysine for arginine; phenylalanine for threonine; and the converse of the above. Therefore, it is to be understood that the present invention embraces modified polypeptides so long as the epitope of the RS virus fusion protein remains unchanged.

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Term: (RT near0 PCR) same solution

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USPT	14 same ten	11	<u>L5</u>
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USPT	12 same ten	14	<u>L3</u>
USPT	11 same solution\$	2156	<u>L2</u>
USPT	peptide near0 synthesis	11285	<u>L1</u>

WEST

Generate Collection

L6: Entry 85 of 131

File: USPT

Feb 15, 1994

DOCUMENT-IDENTIFIER: US 5286789 A

TITLE: Solid phase multiple peptide synthesis

DEPR:

The ELISA (Enzyme Linked ImmunoSorbent Assay) represents one of the most useful potential applications of the SPMPs technique. An ELISA was accomplished in SPMPs by direct synthesis of the peptide on the AEA surface, followed by acid deprotection of the side-chain protecting groups. The wells were then blocked with bovine serum albumin to reduce non-specific binding. Rabbit anti-(.alpha.-MSH) or rabbit anti-Leu-5-enkephalin was added to the wells, and antibodies recognizing the peptide were bound. Detection of the bound rabbit antibodies binding was accomplished by incubation with alkaline phosphatase (AP) conjugated to goat anti-rabbit IgG, followed by washing to remove excess conjugate, and addition of p-nitrophenyl phosphate, a substrate of AP. The AP turned over the substrate to generate p-nitrophenolate, which was spectrophotometrically detected at 405nm in an ELISA plate reader. Dilutions of rabbit IgG passively adsorbed to a polystyrene microtiter plate were detected with different dilutions of the conjugate. A final dilution of 1:3500 was found to be optimum. Control wells (no rabbit IgG) showed low background binding (absorbance at 405nm-650nm <0.040). This validated the use of this conjugate for the SPMPs ELISA studies.

WEST

Generate Collection

L6: Entry 100 of 131

File: USPT

Oct 15, 1991

DOCUMENT-IDENTIFIER: US 5057415 A

TITLE: Continuous enzymatic process for preparing peptides

DEPR:

The separation step is generally effected in a column containing the hydrophobic adsorbent, although any conventional vessel can be used. Suitable hydrophobic adsorbents include any adsorbent capable of selectively binding an N-protected, preferably N-phenacyl, di- or oligopeptide and efficiently separating it from an aqueous solution. Polystyrene beads, e.g., Amberlite XAD-2 (Rohm & Haas, Philadelphia, Pa.), is especially useful for removing the N-protected (di)peptide which is formed from the reaction mixture. One advantage of such an adsorbent is that it separates and retains the N-protected peptide without the need to adjust the pH of the effluent from the first enzyme reactor and permits facile recirculation of the adsorber column effluent, containing unreacted amino acid or oligopeptide, to the peptide synthesis reactor.

WEST☐ Generate Collection

L6: Entry 122 of 131

File: USPT

Jan 8, 1980

DOCUMENT-IDENTIFIER: US 4182654 A

TITLE: Production of polypeptides using polynucleotides

BSPR:

Furthermore, it will be appreciated that the foregoing, generally described reiterative procedure, is useful with respect to both the C-terminus and N-terminus routes to peptide synthesis. The principal differences between the two routes reside in the manner in which the growing chain is attached to the handle and in the selection of blocking groups and enzymes. Also, there can be a difference in the manner in which activation for chain elongation is accomplished, for example the use of active esters for N-terminal growth versus carbodiimide mediated coupling. The latter, which is useful with respect to both C- and N-terminal growth, is preferred. Most preferred is the C-terminal approach to chain elongation.

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USPT	12 same multipl\$	36	L4
USPT	12 same multiplex\$	0	L3
USPT	11 same enzyme\$	777	L2
USPT	peptide near0 synthes\$	13442	L1

WEST**End of Result Set**

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L5: Entry 8 of 8

File: USPT

Dec 14, 1999

DOCUMENT-IDENTIFIER: US 6001364 A

TITLE: Hetero-polyoxime compounds and their preparation by parallel assembly

DEPR:

In one embodiment the baseplate or COSM is designed and prepared by recombinant methods or isolated from natural sources, and an oxime-forming complementary orthogonal reactive group, such as an aldehyde, is site-specifically formed on the C-terminal of the polypeptide by selective enzyme catalyzed reverse proteolysis or at an N-terminal serine or threonine by mild oxidation. (See for example Geoghegan et al. (Bioconjugate Chem. (1992) 3: 138-146), Gaertner et al. (Bioconjugate Chem. (1992) 3: 262-268), EP 243929, and WO 90/02135 which are incorporated herein by reference.) For use as a multivalent baseplate a homogeneous preparation of recombinant or natural peptide preferably has multiple C- or N-termini, such as would occur in a dimer or tetramer, for ease of specific formation of orthogonally reactive groups. For example an insulin analog having an A chain covalently linked to a B chain, each chain having an N-terminal serine (or threonine), can be converted to a divalent aldehyde baseplate by regio-selective oxidation. In a further embodiment, the C-termini can be modified by enzyme catalyzed reverse proteolysis to create a tetra-aldehyde baseplate. Such baseplate have at least the advantages of size and complexity over solid phase synthesis peptide baseplate. As is taught herein a great flexibility is available to one in the art for designing and obtaining baseplates and COSMs of desired sequence, structure and function with specifically placed complementary reactive groups.

WEST

Generate Collection

L4: Entry 25 of 36

File: USPT

Sep 29, 1998

DOCUMENT-IDENTIFIER: US 5814460 A

TITLE: Method for generating and screening useful peptides

DRPR:

FIG. 1: Schematic drawing of peptide synthesis/trapping equipment and procedures of this invention. The equipment includes a stirred, temperature-controlled, reaction chamber 1, for example a system in which the proteolytic enzymes and starting peptides are placed and the scrambling reaction initiated. To maintain sterility within the reaction chamber, all reagents are added to, and aliquots removed from, the pre-sterilized reaction chamber 1 by way of a micro-filtration device 2, through a three way valve. Pressure is released to the atmosphere by way of a second micro-filtration valve 3. A Gilman bacterial air vent is suitable. Suitable antibacterial agents may also be added to the reaction mixture to inhibit bacterial growth. The contents of the reaction chamber 1 in one embodiment of the invention are circulated by pump 4 through binding chamber 5. The apparatus is assembled with parallel binding chambers 5 to concurrently assay multiple macromolecular sinks and to perform comparative identification of peptides for structurally related macromolecular systems.

WEST

Generate Collection

L4: Entry 35 of 36

File: USPT

Nov 22, 1994

DOCUMENT-IDENTIFIER: US 5366862 A

TITLE: Method for generating and screening useful peptides

DRPR:

FIG. 1: Schematic drawing of peptide synthesis/trapping equipment and procedures of this invention. The equipment includes a stirred, temperature-controlled, reaction chamber 1, for example a system in which the proteolytic enzymes and starting peptides are placed and the scrambling reaction initiated. To maintain sterility within the reaction chamber, all reagents are added to, and aliquots removed from, the pre-sterilized reaction chamber 1 by way of a micro-filtration device 2, through a three way valve. Pressure is released to the atmosphere by way of a second micro-filtration valve 3. A Gilman bacterial air vent is suitable. Suitable antibacterial agents may also be added to the reaction mixture to inhibit bacterial growth. The contents of the reaction chamber 1 in one embodiment of the invention are circulated by pump 4 through binding chamber 5. The apparatus is assembled with parallel binding chambers 5 to concurrently assay multiple macromolecular sinks and to perform comparative identification of peptides for structurally related macromolecular systems.

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USPT	12 same multiplex\$	0	<u>L3</u>
USPT	11 same enzyme\$	777	<u>L2</u>
USPT	peptide near0 synthes\$	13442	<u>L1</u>

WEST

Generate Collection

L6: Entry 69 of 131

File: USPT

May 21, 1996

DOCUMENT-IDENTIFIER: US 5518912 A

TITLE: Endopeptidase

DEPR:

Thus, the endopeptidase of this invention is believed useful as a condensation catalyst in the synthesis of larger peptides from a plurality of smaller peptides. The use of certain proteolytic enzymes as condensation catalysts has been described. See e.g. U.S. Pat. No. 5,002,871 which patent is incorporated by reference as if fully set forth herein and V. Kasche, "Protease and peptide synthesis," Proteolytic enzymes a practical approach, pp. 125-145 ed. R. J. Baynum and J. S. Bond, IRL Press (1989).

WEST

Generate Collection

L6: Entry 78 of 131

File: USPT

Nov 22, 1994

DOCUMENT-IDENTIFIER: US 5367072 A

TITLE: Reagents for automated synthesis of peptide analogs

BSPR:

This invention relates to methods for the automated solid-phase synthesis of peptide analogs and to novel reagents useful therein. In one aspect, the present invention is directed to a process which uses novel reagents which comprise novel heterobifunctional semicarbazide (I), or semicarbazone (II) or (III) linker moieties which may be attached to insoluble resins (or supports), via a pendant carboxylic acid group to give a support reagent suitable for automated solid phase synthesis of peptide analogs. The resulting support reagent is suitable for use in a conventional automated or semi-automated peptide synthesizer using protected amino acids or amino acid analogs, to give a protected peptide (or peptide analog) aldehyde, attached to the support reagent. The product peptide aldehyde or peptide analog is cleaved from the support and deprotected to give the desired peptide analog in good yield. Using this process and reagents of the present invention, peptide aldehydes and analogs can be rapidly and efficiently produced. These peptide analogs are useful as enzyme inhibitors and have potential as pharmaceutical agents.

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USPT	111 same (advantag\$ or useful\$)	22	<u>L12</u>
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USPT	12 same light	9	<u>L10</u>
USPT	16 and py<1993	131	<u>L9</u>
USPT	16 same py<1993	0	<u>L8</u>
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USPT	12 same (advantag\$ or useful\$)	131	<u>L6</u>
USPT	14 same (advantag\$ or useful\$)	8	<u>L5</u>
USPT	12 same multipl\$	36	<u>L4</u>
USPT	12 same multiplex\$	0	<u>L3</u>
USPT	11 same enzyme\$	777	<u>L2</u>
USPT	peptide near0 synthes\$	13442	<u>L1</u>

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FILE 'MEDLINE, BIOSIS, CAPLUS, EMBASE, GENBANK' ENTERED AT 08:04:05 ON

25

SEP 2001

L1 5891 S (PRODUC? OR SYNTHES?) (P)(ORGANIC (W)COMPOUND?)
L2 1 S L1 (P)OXIDIZ? (P)REDUC? (P)CONDENS?
L3 6 S L1 (P)OXIDIZ? (P)REDUC? (P)LIGHT
L4 89702 S RT(W)PCR
L5 1002 S L4 AND PY<1993
L6 46 S L5 (P)SCREEN?
L7 4 S L6 (P)REPEAT?

iu P.; Perryman M.B.; Liao W.; Siciliano M.J.

CS Department of Molecular Genetics, University of Texas, M.D. Anderson
Cancer Center, Houston, TX 77030, United States

SO Somatic Cell and Molecular Genetics, (1992) 18/1 (7-18).
ISSN: 0740-7750 CODEN: SCMGDN

CY United States

DT Journal; Article

FS 022 Human Genetics

027 Biophysics, Bioengineering and Medical Instrumentation

029 Clinical Biochemistry

LA English

SL English

AB The use of splice donor site consensus sequences as primers in cDNA
synthesis (to make a cDNA library from heterogeneous RNA or unprocessed
transcript-an hn-cDNA library) and the **screening** of such an
hn-cDNA library with human **repeat** DNA probe in order to isolate
human genes from somatic cell hybrids have been demonstrated. Here, we
optimize and evaluate the efficiency and limitations of the approach.
Computer analysis of genomic sequences of 22 randomly selected human

genes
indicated that hexamers CTTACC, CTCACC, and CCTACC were most efficient at
beginning first-strand cDNA synthesis at donor splice sites of hnRNA and
suggested that the procedure is efficient for priming cDNA synthesis of

at
least one exon from most every gene. Primer extension experiments
established conditions in which the primers would initiate synthesis of
cDNA starting from a perfectly matched position on the RNA template at
more than 60-fold higher yield than any other product. By isolation of a
clone containing exon III of the human DNA repair gene ERCC1, we indicate
that the approach is capable of cloning exons from weakly expressed
genes.

Sequencing of clones revealed a structure of hn-cDNA clones consistent
with the expectations of the cloning strategy and indicated the potential
of the clones in detecting polymorphisms. Finally, we demonstrate that

the
expression of these hn-cDNA sequences in cells can be detected
efficiently

at the hnRNA level by reverse transcriptase-polymerase chain reaction (
RT/PCR).

Combinatorial
Chemistry
Libraries
Solid (p) phase (w) peptide (w) synthesis?
Synthesis?

NT 9

RE

- (1) Devys, D; Nature Genetics 1993, V4, P335 CAPLUS
- (2) Heitz, D; Science 1991, V251, P1236 CAPLUS
- (5) Pieretti, M; Cell 1991, V66, P817 CAPLUS
- (6) Siomi, H; Cell 1993, V74, P291 CAPLUS
- (7) Sutcliffe, J; Human Molecular Genetics 1992, V1, P397 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 4 CAPLUS COPYRIGHT 2001 ACS

AN 2001:73441 CAPLUS

DN 134:142776

TI Diagnosis of the fragile X syndrome using the FMR-1 gene sequence and
methylation-sensitive restriction endonuclease and PCR primer probes

IN Caskey, C. Thomas; Nelson, David L.; Pieretti, Maura; Warren, Stephen T.;
Oostra, Ben A.; Fu, Ying-Hui

PA Baylor College of Medicine, USA

SO U.S., 38 pp., Cont.-in-part of U.S. Ser. No. 705,490.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	US 6180337	B1	20010130	US 1991-751891	19910829
	US 6107025	A	20000822	US 1991-705490	19910524
	WO 9220825	A1	19921126	WO 1992-US4447	19920522 <--
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	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				
	AU 9221854	A1	19921230	AU 1992-21854	19920522 <--
PRAI	US 1991-705490	A2	19910524		
	US 1991-751891	A	19910829		
	WO 1992-US4447	A	19920522		

AB A sequence of the FMR-1 gene is disclosed. This sequence and related
probes, cosmids and unique **repeats** are used to detect X-linked
diseases and esp. the fragile X syndrome. Also, methods using
methylation-sensitive restriction endonuclease and PCR primer probes were
used to detect X-linked diseaseby measuring cGG **repeats** and the
meth